

Application No. 10/678,751
Reply to Office Action Dated June 16, 2005
Amendment Dated September 16, 2005

Amendments to the Claims:

This Listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-50 (Cancelled).

51. (Previously Presented) A biocompatible non-porous matrix based on chitosan and an acid, wherein said matrix is produced by:

providing an aqueous solution comprising a chitosan and an acid, wherein said acid is present in excess;

drying the solution without freezing; and

removing excess acid before or/and after the drying.

52. (Previously Presented) The non-porous biocompatible matrix of claim 51, wherein the acid is a hydroxy carboxylic acid.

53. (Previously Presented) The non-porous biocompatible matrix of claim 51, wherein the matrix is in the form of a sheet, a hollow article, or a roll.

Application No. 10/678,751
Reply to Office Action Dated June 16, 2005
Amendment Dated September 16, 2005

54. (Previously Presented) The non-porous biocompatible matrix of claim 52, wherein the hydroxy carboxylic acid is a member selected from the group consisting of glycolic acid, lactic acid, malic acid, tartaric acid, citric acid and mandelic acid.

55. (Previously Presented) The non-porous biocompatible matrix of claim 54, wherein the hydroxy carboxylic acid is lactic acid

56. (Previously Presented) A biocompatible matrix system comprising at least one biocompatible non-porous matrix as claimed in claim 51 and at least one biocompatible porous matrix.

57. (Previously Presented) The biocompatible matrix system of claim 56, wherein the at least one biocompatible porous matrix has a structure based on chitosan and an acid.

58. (Previously Presented) The biocompatible matrix system of claim 57, wherein the acid of the porous matrix is a hydroxy carboxylic acid.

59. (Previously Presented) The biocompatible matrix system of claim 57, wherein the porous matrix is produced by:

providing an aqueous solution comprising a chitosan and an acid, wherein said acid is present in excess;

freezing and drying the solution; and

removing excess acid before or/and after the freezing.

60. (Previously Presented) The biocompatible matrix system of claim 59, wherein the acid is a hydroxy carboxylic acid.

61. (Previously Presented) The biocompatible matrix system of claim 59, wherein the drying is achieved by sublimation under reduced pressure.

62. (Previously Presented) The biocompatible matrix system of claim 56, wherein the at least one non-porous matrix and the at least one porous matrix are disposed alternatively in layers.

63-76. (Cancelled)

77. (Currently amended) A biocompatible chitosan matrix having anisotropic structures, said matrix comprising chitosan and an acid.

78. (Previously Presented) The anisotropic biocompatible matrix of claim 77, wherein the acid is a hydroxy carboxylic acid.
79. (Previously Presented) The anisotropic biocompatible matrix of claim 77, wherein said matrix comprises fibers or chambers in parallel alignment.
80. (Previously Presented) The anisotropic biocompatible matrix of claim 77, wherein said matrix is porous.
81. (Previously Presented) The anisotropic biocompatible matrix of claim 77, wherein said matrix is produced by:

providing an aqueous solution comprising a chitosan and an acid, wherein the acid is present in excess,

providing anisotropic freezing and drying of the solution,

removing excess acid before or/and after the freezing.
82. (Previously Presented) The anisotropic biocompatible matrix of claim 81, wherein the acid is a hydroxy carboxylic acid.

Application No. 10/678,751
Reply to Office Action Dated June 16, 2005
Amendment Dated September 16, 2005

83. (Previously Presented) The anisotropic biocompatible matrix of claim 81, wherein the drying is achieved by sublimation under reduced pressure.

84. (Previously Presented) A biocompatible matrix system comprising at least one biocompatible anisotropic porous matrix as claimed in claim 77 and at least one biocompatible non-porous matrix.

85-88 (Cancelled).

89 (Previously Presented) A biocompatible matrix based on chitosan and an acid, wherein said matrix comprises nucleic acids in chemically coupled-on form.

90. (Previously Presented) The biocompatible matrix of claim 89, wherein the acid is a hydroxy carboxylic acid.

91-113 (Cancelled).